

**REMARKS**

Initially, Applicants wish to thank the Examiner for the detailed Official Action of October 18, 2008. Upon entry of the present Amendment, claims 1, 3 and 6 will have been amended and new claims 8-10 will have been added. Applicants submit that the amended claims are in a condition for allowance.

**SUMMARY OF THE OFFICE ACTION**

The Examiner has rejected claims 3 and 6 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and claim the invention. The Examiner has rejected claims 1, 3-4 and 6-7 under 35 U.S.C. § 102(e) as being anticipated by newly cited SUNAGA et al. (U.S. Patent No. 6,661,134). The Examiner has also rejected claims 1-4 and 6-7 under 35 U.S.C. § 102(b) as being anticipated by newly cited PATYK et al. (U.S. Patent No. 5,939,807). The Examiner has further rejected claims 1, 3-4 and 6-7 under 35 U.S.C. § 102(b) as being anticipated by newly cited OCHI (U.S. Patent No. 5,083,052). The Examiner has also asserted that claim 5 is unpatentable under 35 U.S.C. § 103(a) over PATYK et al. in view of KUROME et al. (U.S. Patent No. 4,156,821).

**THE REJECTION OF CLAIMS 3 AND 6 UNDER 35 U.S.C. § 112, SECOND PARAGRAPH**

The Official Action stated that it is not clear how the claim 3 and 6 recitations are further distinguished from claim 1. Although Applicants believe that the recitations of claims 3 and 6 are further distinguished from claim 1, Applicants have amended claims 3 and 6 to further distinguish them from claim 1. More specifically, claims 3 and 6 have been amended to recite that the heat radiating member is used to radiate heat from the switching elements. Accordingly,

it is respectfully submitted that claims 3 and 6 are not indefinite and further distinguished from claim 1, and the Examiner is respectfully requested to withdraw the rejection under 35 U.S.C. § 112, second paragraph.

**THE REJECTION OF CLAIMS 1, 3-4, 6 AND 7 UNDER 35 U.S.C. § 102(e)**

The Official Action has rejected claims 1, 3-4, 6 and 7 as being anticipated by either SUNAGA et al., PATYK et al. or OCHI. Applicants respectfully submit that SUNAGA et al., PATYK et al. or OCHI and the motors disclosed therein do not anticipate amended claims 1, 3-4, 6 and 7. For a Section 102 rejection to be proper, the cited reference must teach or suggest each and every claimed element. *See M.P.E.P. § 2131; M.P.E.P. § 706.02.* Thus, if the cited reference fails to teach or suggest one or more elements, then the rejection is improper and must be withdrawn. The Applicants respectfully submit that SUNAGA et al., PATYK et al. and OCHI fail to teach or show at least one or more of the features of amended claims 1, 3-4, 6 and 7.

**AMENDED CLAIM 1**

Applicants' amended claim 1 recites a brushless motor having, *inter alia*, a resilient member, affixed to an external end of the heat-radiating member by a plurality of fasteners, for elastically pressing the switching elements against the heat-radiating member in a plurality of directions substantially transverse to the rotational axis of the rotor. Applicants respectfully submit that SUNAGA et al., PATYK et al. and OCHI do not teach, show or suggest, *inter alia*, the claimed resilient member affixed to an external end of a heating-radiating member by a

plurality of fasteners for pressing the switching elements in directions traverse to the rotational axis of the rotor.

**SUNAGA et al.**

SUNAGA et al. discloses a pressing member 60 for pressing switching devices 41 in a direction parallel to the axis of rotation the of rotor 3, instead of transverse to the axis of rotation as recited by Applicants. SUNAGA et al. also discloses that the pressing member 60 is located on the internal side of the heat sink 70, instead of being affixed to the external end of the heat radiating member, as recited in claim 1. See, Fig. 1 of SUNAGA et al. Accordingly, Applicants respectfully submit that amended claim 1 is not anticipated by SUNAGA et al. for at least each of these reasons.

**PATYK et al.**

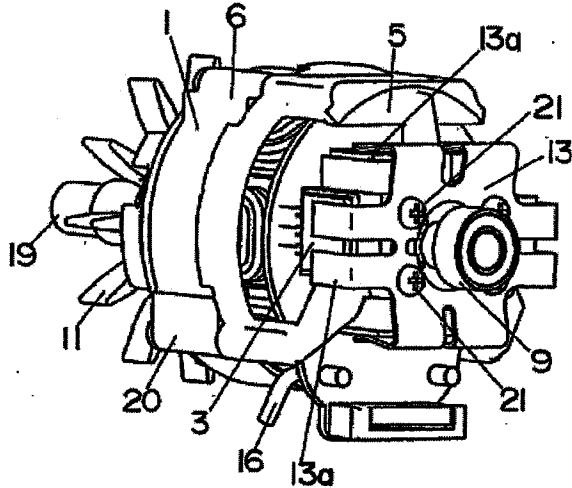
PATYK et al. discloses a clip 100 for pressing power switching elements 90 against an internal surface of a rear end cap 20. PATYK et al., however, does not disclose that the clip 100 is affixed to the external end of a heat-radiating member by a plurality of fasteners, as claimed by Applicants. See, Fig. 4 of PATYK et al. Moreover, PATYK et al. disclose a cover 102 installed over the clip 100 to hold the clip securely in cap 20 and to substantially close the rear side 104 of end cap 20. See, col. 6, lines 30-44. PATYK et al., therefore, does not disclose a heat-radiating member, having a plurality of openings for exposing the switching elements and the circuit board, as claimed by Applicants. Accordingly, Applicants respectfully submit that amended claim 1 is not anticipated by PATYK et al. for at least each of these reasons.

**OCHI**

OCHI discloses a plurality of clips 134 for pressing power transistors Q1-Q6 in a direction parallel to the axis of rotation of rotor 104, instead of transverse to the axis of rotation as recited by Applicants. See, Fig. 16. OCHI also fails to disclose that the clips 134 are affixed to the end bracket 107 with a plurality of fasteners as claimed by Applicants. See also, Fig. 16 of OCHI. Accordingly, Applicants respectfully submit that amended claim 1 is not anticipated by OCHI for at least each of these reasons.

**DIFFERENCES BETWEEN CLAIM 1 AND THE CITED PRIOR ART**

In order to appreciate the differences between the present invention, as recited in claim 1, and SUNAGA et al., PATYK et al. or OCHI, FIG. 3 of the present application is reproduced below.

*Fig. 3*

From FIG. 3 it can be readily appreciated that Applicants disclose a resilient member 13 that is affixed to a heat radiating member 5 by a plurality of fasteners or screws 21. The resilient

member 13 causes the switching elements 3 to contact the external end of the heat-radiating member 5 by elastically pressing the switching elements 3 against the heat-radiating member 5 in a direction transverse to the axis of rotation of the rotor. See also paragraph [0025] of Applicants' published application. Applicants respectfully submit that SUNAGA et al., PATYK et al. and OCHI do not teach, show or suggest, *inter alia*, the claimed resilient member affixed to the external end of a heat-radiating member by a plurality of fasteners for elastically pressing the switching elements against the heat-radiating member in a direction transverse to the rotation of the rotor.

#### **NEW CLAIMS 8-10**

New claims 8-10 have been added to the application, and they recite a brushless motor, wherein the resilient member includes a clip having an M like cross sectional shape, and a central portion of the clip is fastened to the heat-radiating member by the fasteners. Claims 9 and 10 more specifically recite that the fasteners include screws that enable the resilient member to increase the pressure applied to the switching elements. The advantages of these features are described at page 8, lines 8-23 of the present application. More specifically, the present application teaches that:

Because one clip 13 is used for pressing the plurality of switching elements 3, increase in the number of the components mounted on the circuit board 4 can also be kept small. The clip 13 has an M-character-like shape when observed in a section, and the center of the clip 13 is contacted and fixed with screws 21 to the heat-radiating member 5. Then the displacement of the clip 13 can be increased. By screwing the center of the clip 13 with the M-character-like section to the heat-radiating member 5 with the screws 21, the pressure applied to the switching elements 3 is increased so as to improve the heat conduction between them, and the heat can be radiated more effectively.

Applicants believe that the prior art fails to recognize the advantages of Applicants' invention in the combination of claims 8-10, and that claims 8-10 are patentable over the cited prior art.

### **DEPENDENT CLAIM 5**

The Examiner rejected dependent claim 5 as being unpatentable under 35 U.S.C. § 103(a) over PATYK et al. in view of KUROME et al. The Examiner has acknowledged that PATYK et al. fails to disclose "a bump protruding from an outer surface". KUROME et al., however, fails to disclose a heat-radiating member, and claim 5 specifically recites "the bump has a hole for screwing said one of said iron cores to said heat-radiating member". Since the bump of KUROME et al. is not for screwing an iron core to a heat-radiating member, Applicants respectfully submit that KUROME et al. does not cure the deficiencies of PATYK et al., and that claim 5 is patentable over any proper combination of PATYK et al. in view of KUROME et al.

### **DEPENDENT CLAIMS 2-4, 6 AND 7**

With regard to claims 2-7, Applicants assert that they are allowable at least because they depend, directly or indirectly, from independent claim 1, which Applicants submit has been shown to be allowable, as well as based upon their own combination of recitations. Accordingly, Applicant respectfully requests reconsideration of the outstanding rejections and an indication of the allowability of all of the claims in the present application.

## CONCLUSION

In view of the herein contained amendments and remarks, Applicants respectfully request reconsideration and withdrawal of the previously asserted rejections set forth in the Official Action of April 8, 2008, together with an indication of the allowability of all pending claims, in due course. Such action is respectfully requested and is now believed to be appropriate and proper.

Any amendments to the claims in this Submission, which have not been specifically noted to overcome a rejection based upon the prior art, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to attach thereto.

If any extension of time is deemed to be necessary to maintain the pendency of the application, including any extension of time fees for entry of an Examiner's Amendment, the Patent and Trademark Office is hereby requested and authorization is hereby provided to charge any necessary fees to maintain the pendency of this application to Deposit Account No. 19-0089.

Should the Examiner have any questions concerning this Reply or the present application, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

Respectfully Submitted,  
Tsutomu NATSUHARA et al.

Bruce H. Bernstein  
Reg. No. 29,027

William Pieprz  
Reg. No. 33,630

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GREENBLUM & BERNSTEIN, P.L.C.  
1950 Roland Clarke Place  
Reston, VA 20191  
(703) 716-1191